BRUHAT BANGALORE MAHANGARA PALIKE

RAJARAJESHWARINAGARA ZONE

Name of the work:	**Developmental works for providing Drinking of water Jalahalli ward No 16**
Estimate Cost Rs	**:25.00 Lakhs**
Head of Account	**: 14th Finance 2015-16**
Ward No	**:Jalahalli Ward 16**

Assistant Executive Engineer
Yeshwanthapura sub Division
BBMP

Executive Engineer
Rajarajeshwarinagara Division,BBMP

BRUHAT BANGALORE MAHANGARA PALIKE

RAJARAJESHWARINAGARA ZONE

Name of the work: **Developmental works for providing Drinking water Jalahalli ward No 16**

This is to certify that sri Nanjappa Assisstant Executive Engineer Yeshwanthapura sub Division BBMP & Sri K.P.Umesh Assisstant Engineer Yeshwanthapura sub Division BBMP, have personally visited the spot of the above work & Prepared the Estimate using the sanction of schedule of the Rates & Providing for the most Economical & safe way of executing the work.

Assisstant Engineer
Ward No 16

Assistant Executive Engineer
Yeshwanthapura sub Division
BBMP

BRUHAT BANGALORE MAHANAGARA PALIKE

YESHWANTHAPURA SUB DIVISION

DETAILED ESTIMATE FOR 4 BOREWELL

Name of Work	Drilling of borewell @ Point (1) siddarthanagara, Point (2) siddarthanagara Ponit (3) siddarthanagara Point (4) siddarthanagara in Ward No 16

						Estimatd Cost (Rs) :-			
Sl. No.	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	Geophysical investigation of site for sinking borewell for supply drinking water to the habitation either through the hand pump M.W.S or P.W.S.S by vertical electrical sounding by adopting venner or schlumberger's method including reconnaissance survey of geological formation Geophysical investigation of existing ground water infecundity its quality, quantity & acceptability of the user indicating the location of site recommended depth of casting pipe required to seal the top in consolidated formation including an extra depth of 1.00 Mtr in consolidated formation of proper scatting of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation technical personal and labour etc.,**BWSSB SR 08-09 It no. 4, Page no.59**									
		Each	4				**4.00**	**1938.46**	**7754.00**
2	Sinking borewell of 165 mm dia clear using super fast hydraulic Rig of capacity 250 PSIG and Above 900 CFM & above in all Strata including over burden upto 20 mtrs fixing of casing pipes, collars and cap with necessary cutting, threading and welding including transportation of Rig and Supporting vehicle, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding cost of casing pipes, collars and cap, etc.,**BWSSB SR 08-09 It no. 1, Page no.59**								
	a) 0.00 to 50.00	Rmt	4			50	**200.00**	**311.95**	**62390.00**
	b) 50.00 to 100.00	Rmt	4			50	**200.00**	**411.00**	**82200.00**
	c) 100.00 to 150.00	Rmt	4			50	**200.00**	**458.00**	**91600.00**
	d) 150.00 to 200.00	Rmt	4			50	**200.00**	**504.00**	**100800.00**
	e) 200.00 to 250.00	Rmt	4			50	**200.00**	**557.00**	**111400.00**
3	Supply of ISI mark 163 mm nominal bore medium black ERW **casing pipe 'B' class black** electric resistance continuous welded mild steel tube medium grade, confirming to IS 1239 (Part I) / 1990 amendments 1-5 with latest amendments if any in random length of 4 to 7 mts. Both ends threaded confirming to IS 554/1985, one end fixed with a socket and the other end with a plastic protection end. Pipe should be with ISI marking weighing 19.50 kg/mtr (Inclusive of all taxes) **CE (M) BWSSB, Letter No.BWSSB/CE(M)/ACE(M)-II/TA-8/9194/2008-09 dated 21/1/09**								
	a) Casing Pipe	Rmt	4			40	**160.00**	**1350.00**	**216000.00**

Sl. No.	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
4	Providing 175 mm dia **MS Collar** CE (M) BWSSB, Letter No.BWSSB/CE(M)/ ACE(M)-II/TA-8/9194/2008-09 dated 21/1/09	Each	4	7			**28.00**	**150.00**	**4200.00**
5	Providing 175 mm dia **bore Cap** CE (M) BWSSB, Letter No.BWSSB/CE(M)/ ACE(M)-II/TA-8/9194/2008-09 dated 21/1/09	Each	4	1			**4.00**	**150.00**	**600.00**
6	Supplying and delivery at site brand new texmo / innoval / Lubi / Sabar / Atalanta / Calamal make suitable for vertical installation in 150mm dia borewell comprising of single stage of multistage CF pump close coupled by means of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water (Wet type) squirrel cage **submersible induction motor** suitable for operation of 15 HP. 20 stage, 50 Hz, 380/440 volts AC supply fitted with required accessories such as suction casing suction strainers sand guard Non return value etc., complete. The pump and motor shall form an integral unit with all the required fittings for suitable HP of motor and stage **(PWD SR 2015-16 Page no.XXXX ,Item no.29)**								
		No.	4			1	**4.00**	**59300.00**	**237200.00**
7	Supplying and delivery of brand new FINOLEX make PVC insulated X Copper conducter to latest Indian Standard specification with 1x3x4 sq.mm **Submersible flat cable** (PWD Electrical SR 08-09 Chapter 6, It no.30(B)								
		Mtrs	8	470			**3760.00**	**100.00**	**376000.00**
8	Errection of pumpset Including aligning and balance with all necessary errection of materials and labour including supply and errection of One pair of supporting clamps, borewell cap cable clips with bolts nuts valve gauges etc., involved in the job. (necessary GI pipe and specials will be supplied by the board at the site free of cost) **(CE (M) BWSSB, Letter No.BWSSB/CE(M)/ACE(M)-II/TA-8/9194/2008-09 dated 21/1/09)**								
		Nos	4				**4.00**	**1710.00**	**6840.00**
9	KSRB13-7.1-4 : Providing and fixing in position 50mm nominal bore gun metal non-return valve horizontal type of approved make including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No.KBS 13.2.10 / 13.13 Page No 93 Item No 13.55								
		Nos	4				**4.00**	**1490.00**	**5960.00**

Sl. No.	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
10	Supplying and fixing 50mm **GI Union Page No XXXVII PWD SR 2015-16**	No	12				**12.00**	223.7 ✓	**2684.00**
11	Supplying and fixing 50mm **GI Elbow Page No XXXVII PWD SR 2015-16**	No	16				**16.00**	**111.80** ✓	**1789.00**
12	Supplying and fixing 50mm **GI Nipple** Page No XXXVII PWD SR 2015-16	No	20				**20.00**	104.30 ✓	**2086.00**
13	Supplying and fixing 50mm **GI Collar (CE (M) BWSSB, Letter No.BWSSB/CE(M)/ ACE(M)-II/TA-8/9194/2008-09 dated 21/1/09)**	No.	148				**148.00**	**111.80** ✓	**16546.00**
14	Supplying and delivery at site brand new star / Essen / Lotus / Sun shines / Adarsh / GK Controls best indigenous make combined energy **meter cum control panel board unit** of size 1200x600x350 mm minimum mechanically strong vermin and water proof. The unit shall have two detachable doors suitable for operation on 3ph, 50 Hz, 380/440 volts, AC supply with spring loaded latch, locking device with a key ribs should be provided inside the door canopy apron and louvers ventilators shall be provided the combined energy meter cum control panel board unit suitable for operation on 3ph, 50Hz, 380/440 volts AC supply shall be consists etc, complete the panel board shall be consists etc., complete the panel board shall be fabricated on single unit in the above components panel board for suitable pumpset with Star Delta Starter out door type 10 HP to 15 HP **(CE (M) BWSSB, Letter No.BWSSB/CE(M)/ACE(M)-II/TA-8/9194/2008-09 dated 21/1/09)**								
		Nos	4				**4.00**	**6630.00** ✓	**26520.00**
15	KSRB13-3.6 : Providing and fixing in trenches galvanised / mild steel tubes (medium grade) 50mm dia nominal bore with all fittings (earth work in trenches to be measured and paid for separately) including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications. Specification No.KBS 13.2.14 / 13.6 Page No90 Item No 13.15								
		Mtrs	4	225			**900.00**	**431.00** ✓	**387900.00**

Sl. No.	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
16	Erection of combined **panel board and meter unit** with necessary materials and labour including providing cement concrete foundation bed cont door type etc., complete **(CE (M) BWSSB, Letter No.BWSSB/CE(M)/ACE(M)-II/TA-8/9194/2008-09 dated 21/1/09)**								
		Nos	4				4.00	425.00	1700.00
17	Supplying of **TPST** with rewireable porcelain Channels in SM encloser 32 amps **PWD Ele SR 07-08 P.30 It No.1(b)**								
		Nos	4				4.00	1360.00	5440.00
18	Supplying and fixing **20"x20"x2.5" polished wood board** made up not less than 15mm thick plank with front plank one end provided for olding at other end fixing the same of the valve using through bolts and nuts. **(PWD Electrical SR 07-08, P no30/It no.2f)**								
		Nos	4				4.00	285.00	1140.00
19	Supplying and fixing LED Type **panel board** indicating lamp with required colour Suitable for 220 V AC 50Hz 12/24 V DC**(PWD Electrical SR 07-08 P No. 38/It .no35.b)**								
		Nos	4				4.00	355.00	1420.00
20	Wiring for lighting/ power circuit using one of PVC insulated 1100V grade, multis and copper conducted single core cable in open or concealed system of wiring. Group B 4 Sqmm **(PWD Electrical SR 07-08 P No. 9/It .no 20.2d)**								
		Mtrs	4	35			140.00	30.00	4200.00
21	Suppling shunt capacitor conforming to IS 2834,3 phase 400/440 volts grade for power factor improvement of rotating machinarery capacitor in KVAR rating Nos 2 KVAR Capacity **(PWD Ele SR 07-08 P -38, I no.34 (a))**								
		Nos	4	3			12.00	120.00	1440.00
22	Supplying and fixing miniature Circuit breakers on exisiting MCB distribution boards using necessary fixing materials and wiring complete as reqired 5-32 TPN **(PWD Electrical SR 07-08 P No. 35/It .no 13.E(1))**								
		Nos	4				4.00	1005.00	4020.00
23	Supplying, fixing, wiring, earth electrode for grounding conduits, LC cutouts and other equipments on the meter board using 40mm dia 2.90 mm thick GI pipe 2.5 m long buried in a pit. The pit should be filled with equal propotion of solt and charcoal 150 mm alround the pipe to complete depth. The connection from the pipe to the conduct etc., is to be established through GI wire of size as per ISI specification 7.3.3 IS 732 using 12mm dia bolts, nuts, washers and check nuts, etc, the pipe shall have 16 throught holes of 122 mm dia **(PWD Electrical SR 07-08-P no.66/ It No.7)**								
		Nos	4				4.00	1950.00	7800.00
24	Supplying and fixing class A (medium duty) - GI pipe of wall thickness not less than 3.25mm on pole / wall / drain crossing with necessary clamping arrangements for UG cable of 1.1 K.V class 40 mm **(PWD Electrical SR 07-08 - P no.69/It no.15.a))**								
		mtr	4	4			16.00	240.00	3840.00
25	Supplying of **LTUG Cable** having aluminium conductor PVC insulated sheathed, galvanized steel wire / steel 4 core 16 sqmm **(PWD Electrical SR 07-08, P no.67/It no.10 D)**								

Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Nos	16				16.00	2000.00	32000.00
							Miscellaneous and unforeseen charges	573.00
							KRIDL Charges	200000.00
							Total	**2500000.00**
Rupees Twenty Five Lakhs only								

Asst. Engineer
Ward no.16

Asst. Executive Engineer
yeshwanthapura Sub-Division
B.B.M.P.

Executive Engineer
R.R. Nagara Division
B.B.M.P.

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ರೂ. 2500000 =ಅ (Twenty five lakh only)

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ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ರಾಜೇಶ್ವರಿ ನಗರ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-72

TECHNICAL SANCTION

Rs: 25,00,000/- (Twenty five Lakhs only) is accorded under the head: P-3110 14th Finance Vide Pg 8-9.

By CE(R.R.N.): SL.30

Registered as CE (R.R.N) No. subject to conditions contained in enclosed memo No: TS/30/16-17 Date: 11/5/2016.

TA/AE

CE (R.R.N.)